

essential grip on the quality of care rendered by the health care enterprise to the people of the nation. This will probably not be easy, but it must be accomplished. It far overshadows in importance the hoped for benefits, to both patients and public, of yet more competition.

—MSMW

Helmets for Motorcyclists

IN THIS MONTH'S ISSUE, Luna and his co-workers have documented the efficacy of wearing a helmet while riding a motorcycle. Of the various trauma prevention programs, mandatory helmet usage is among the least difficult to implement and carry out. For example, when compared with such other approaches as handgun control, removing drunk drivers from the highways or legalization of drugs, it is uncomplicated and easy.

In 1967 a federal highway safety standard required that all states enact and enforce mandatory helmet laws. In 1976 Congress passed a law revoking federal sanctions against states not complying with the helmet standard. During the time the sanctions were in force (1965 to 1976) the number of fatalities per 10,000 motorcycles fell from 12.8 to 6.5. Between 1976 and 1979, there were 27 states that either repealed or substantially weakened their helmet use laws. This resulted in a 46 percent increase in total motorcycle deaths.

In a study done in California by Harry Hurt,¹ 60 percent of motorcycle riders were not wearing safety helmets at the time of their crashes. Of this group, 26 percent said they did not wear helmets because they were uncomfortable and inconvenient and 53 percent had no expectation of crash involvement. Of those sustaining head injuries, 14 percent were wearing helmets at the time of the crashes; 23 percent of the fatally injured riders were wearing helmets but only 1 helmeted rider died of head injuries. Hurt concluded that the use of a safety helmet is the single most critical factor in the prevention or reduction of head injury.

In a study of 71 motorcyclists admitted to Denver General Hospital² only 38 percent were covered by commercial insurance or workers' compensation. It was found that 59 percent of the unpaid bills were borne by taxpayers. The Maryland Institute for Emergency Medical Services³ carried out a study involving 65 patients. Of these patients, 40 percent did not pay their bills; the bills averaged \$11,038. Twenty-five percent were

uninsured and the combined unpaid bills amounted to \$433,200, all of which had to be absorbed by taxpayers.

Motorcycle helmet opponents argue that helmets reduce peripheral vision and thus contribute to crash risks. Studies done by the National Highway Traffic Safety Administration showed that peripheral vision was found to be restricted in less than 3 percent of currently available helmets. The same opponents argue that helmets make it difficult for cyclists to hear. In the study done by Hurt, helmets did not lower the cyclists' ability to distinguish critical traffic sounds. Helmets are said to contribute to neck injuries. In the California study only 4 of the 980 head and neck injuries were attributed to safety helmets.

The data supporting the use of safety helmets by motorcyclists seem overwhelming. Clearly, helmets reduce death and head injuries. For those who continue to oppose mandatory motorcycle helmet laws a fundamental question must be answered: When do societal rights become more important than individual rights? The answer seems self-evident.

DONALD D. TRUNKEY, MD
*Professor of Surgery
 University of California, San Francisco
 Chief of Surgery
 San Francisco General Hospital*

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2. Status Report, Vol 14, No 10, Jan 21, 1979, p 7. Washington, DC, Insurance Institute for Highway Safety

Noninvasive Methods for the Study of Patients With Coronary Heart Disease

ELSEWHERE IN THIS ISSUE, Dr. Victor F. Froelicher has assembled reports on recent advances and current status of new noninvasive methods of evaluating patients with coronary heart disease. Motivation for these developments, which often provide less precision of anatomical details, is the alleged risk of vascular and cardiac complications induced by catheterization techniques. To put this into perspective, and disregarding the ever increasing financial costs of all methods, there is a small but definite clinical cost of two to three fatalities per thousand patients studied invasively with use of nonoxygenated, hyperosmolar contrast media to obtain visualization of morphologic de-